


# Burrowing Owls on Florida Cattle Ranches



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UF School of Natural Resources & Environment  
December 12, 2019

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## Acknowledgments

- The Boughton Lab
  - University of Florida IFAS Range Cattle Research & Education Center
- Allison Smith, MS Student
- Fish & Wildlife Conservation Commission
- Audubon of the Western Everglades
  - Owl Watch
- Countless Volunteers!
- Private Land-owners and Ranchers



Title slide photo by Li Haoyu

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*Athene cunicularia floridana*

Photo by Li Haoyu

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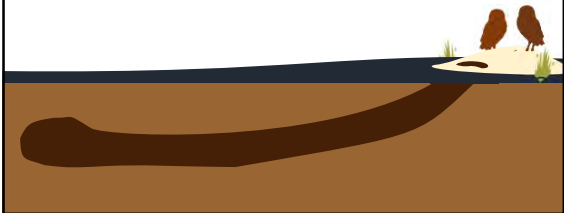
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# Burrows

- 1.5 to 4 meters long
- Up to 1 meter deep



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Burrow decoration

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Where do burrowing owls live?



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Photo by Dustin Angell

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**Range expansion**

- Airports
- Golf Courses
- Open or vacant land



Philip Shirk

© Jean Bal

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What do they eat?

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“Anything they can kill and carry”

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**Past research**

- Focused on urban populations in SW Florida
- Statewide surveys found the most owls in these coastal cities
- Most rural owls found of grasslands used to graze cattle



**PROTECTED BIRD SITE**  
**Burrowing Owl Nesting Area**  
Molesting Owls or their Nests is a Crime. Please Report Violations to 1-888-404-FWCC

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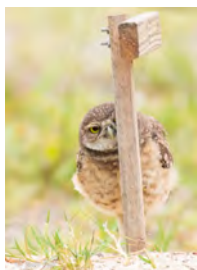
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### Current project



- Use Burrowing Owls as a means to study how animals adapt to living in cities
- Fill in rural Florida Burrowing Owl Knowledge gaps

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### Study sites



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## Field Methods



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Photo by Jean Hall

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Photo by Dustin Angell

Photo by Dustin Angell

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### Territory density

- Owl density varies more from site to site than by habitat type
- Some ranches have higher owl densities than urban sites



Active burrows on a single ranch

The image shows a map of a ranch with numerous small, multi-colored dots scattered across the landscape, representing the locations of active owl burrows. A north arrow is visible in the bottom left corner of the map.

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### Onset of breeding

- Ranch pairs have a median egg-laying date of March 18
- Urban pairs start two weeks earlier on average



A photograph of a screech owl perched on a wooden branch. The owl is facing forward, looking slightly to the right. The background is a soft-focus green, suggesting a natural outdoor setting.

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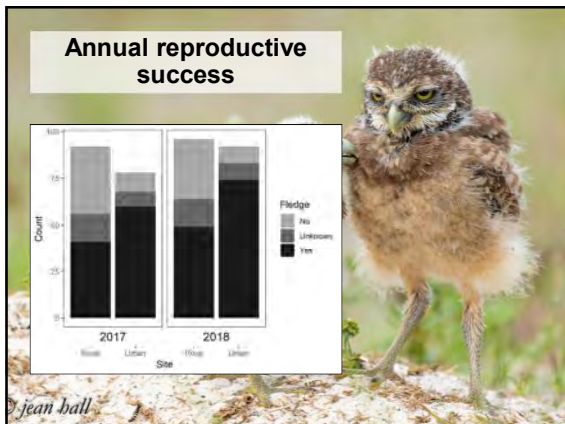
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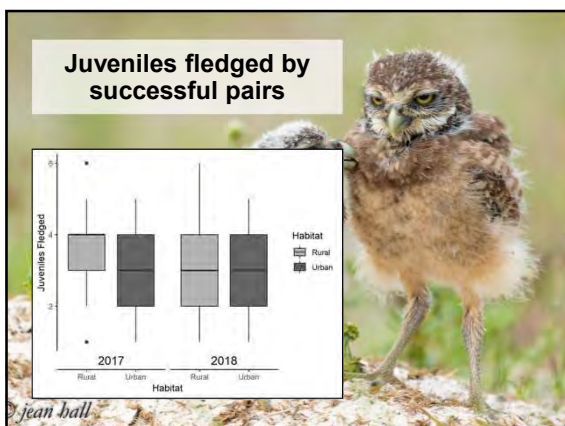
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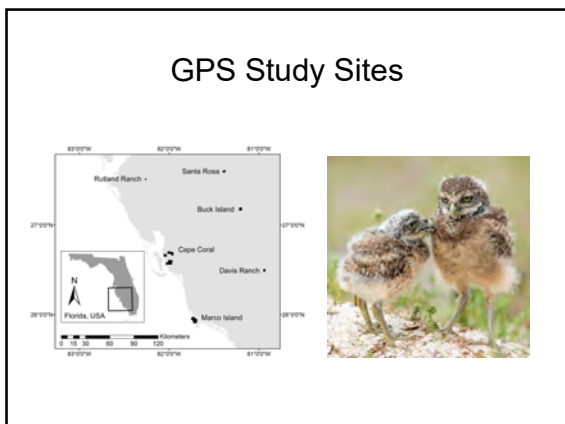
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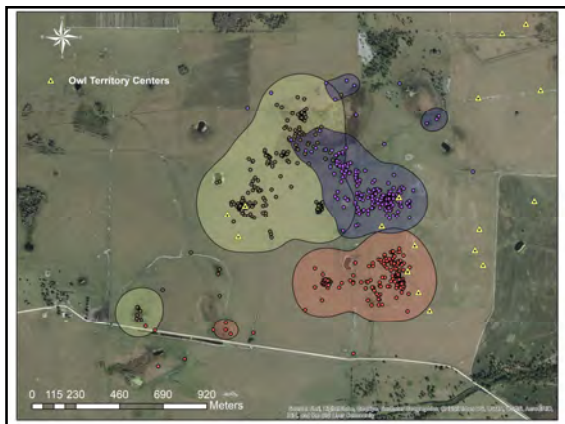
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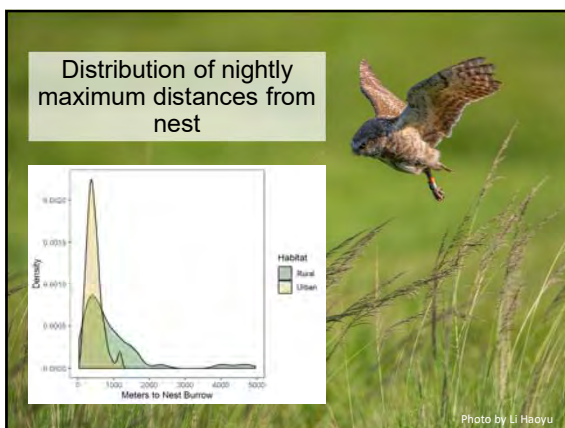
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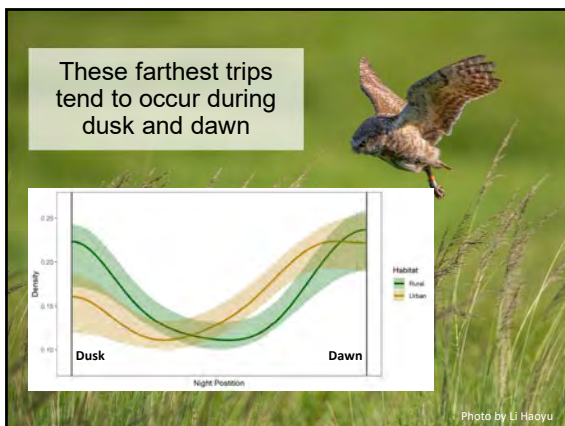
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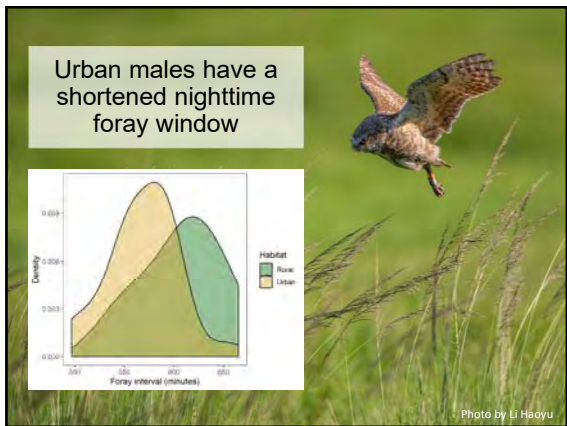
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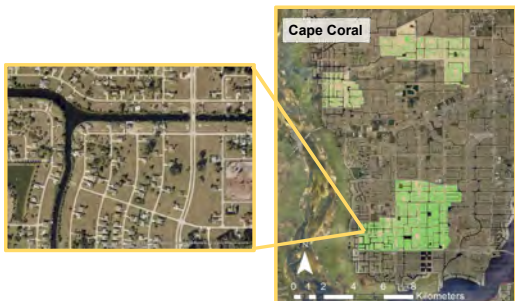
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### Urban space use



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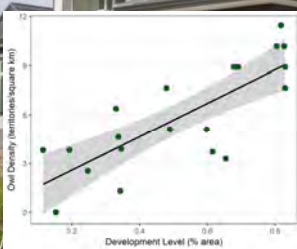
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### Owl density increases with increasing development



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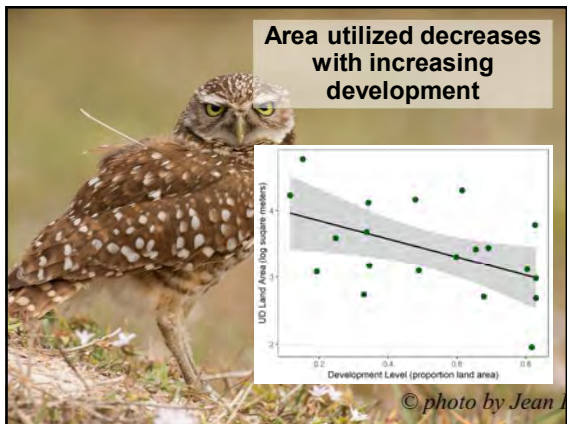
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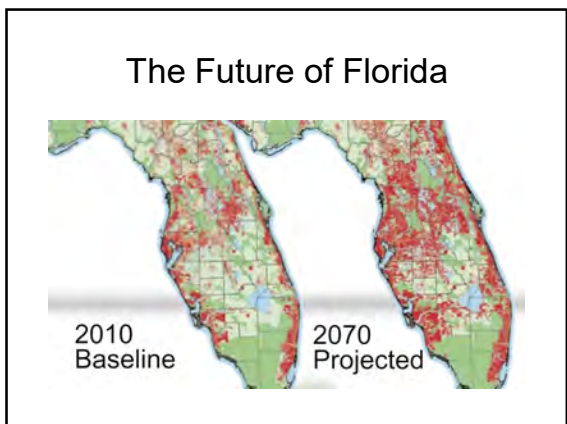
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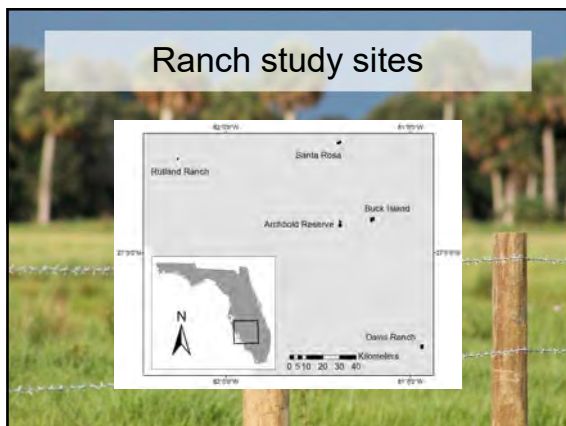
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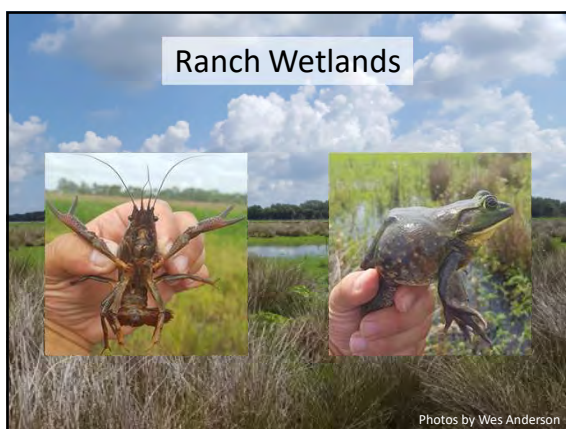
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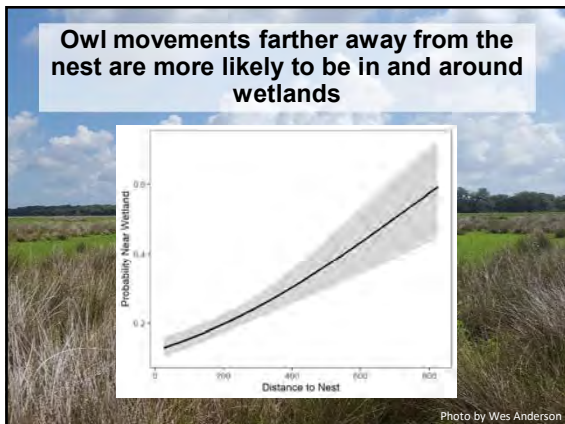
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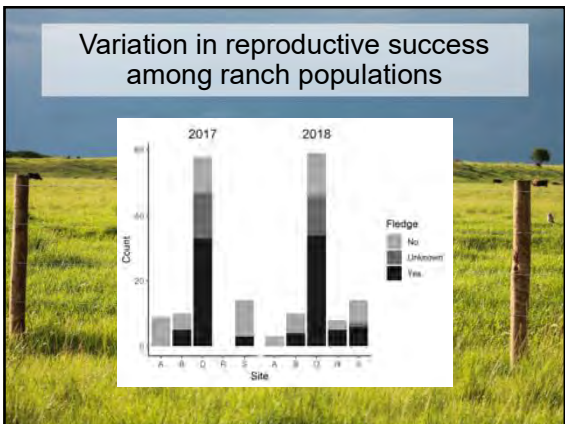
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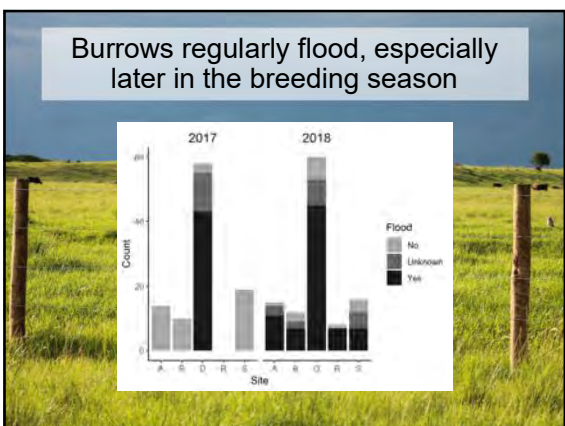
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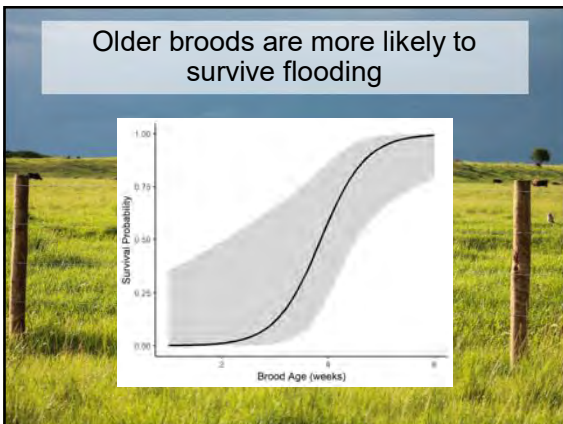
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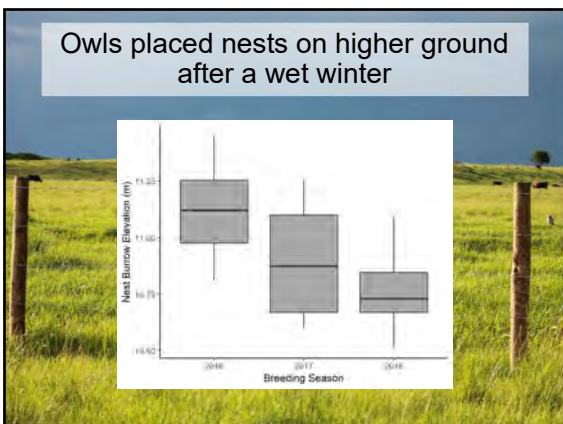
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Wetlands are a potentially important source of resources for Burrowing Owls breeding on ranches

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Wetlands are a potentially important source of resources for Burrowing Owls breeding on ranches

The presence of slightly elevated ground can help flood-displaced juveniles

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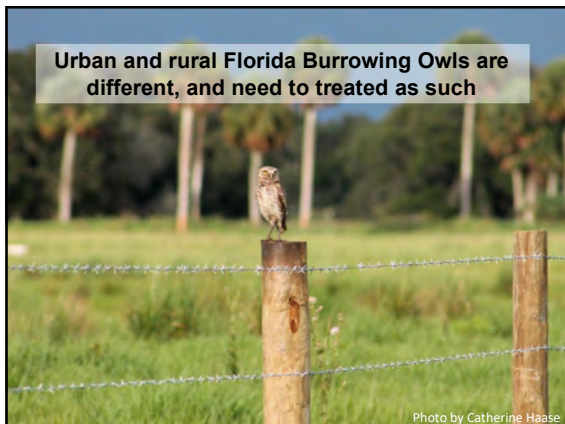
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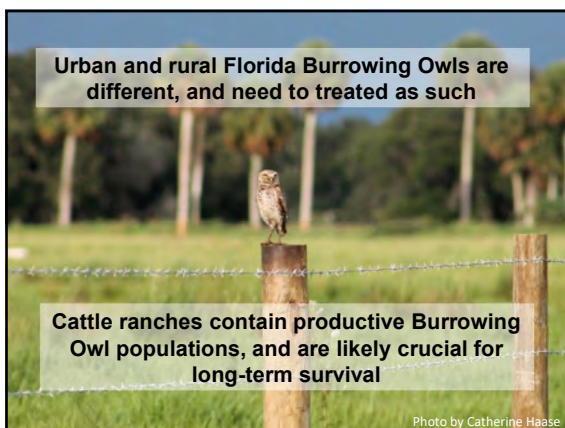
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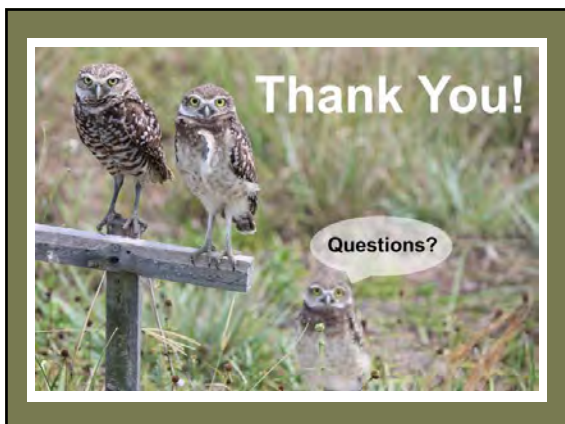
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